

THE STATUS OF THE OPHIDIID FISHES
OPHIDIUM BREVIBARBE CUVIER,
OPHIDIUM GRAELLSI POEY, AND
LEPTOPHIDIUM PROFUNDORUM GILL

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Abstract.—*Ophidium brevibarbe* Cuvier is shown to be the oldest valid name for a common and wide-ranging species of *Lepophidium*, of which *Ophidium graellsii* Poey is a junior synonym and *Lepophidium profundorum* auctorum is a common misattribution. *Leptophidium profundorum* Gill, type species both of *Leptophidium* (preoccupied) and of *Lepophidium*, its replacement name, is a senior synonym of *L. cervinum* (Goode and Bean), a common species in shelf waters along the eastern seaboard of the United States and southeastern Canada.

Several nomenclatural problems have delayed a revision of the ophidiid genus *Lepophidium*, now nearing completion. The answers to these problems are important because they involve: a) the most common shallow-water species which ranges from the southeastern United States and the Northern Gulf of Mexico to the southern coast of Brazil, b) the earliest name in the genus, and c) the type species of the genus. The solution of these problems is the object of this paper. Because the names of two common species are changed as a result, this information is being made available separately so that they will be available to regional works and checklists now in preparation. Counts and measurements used in this paper (Table 1) are as defined by Robins (1962:487-488).

Ophidium brevibarbe Cuvier, 1829

Cuvier (1829:359) simply stated "Nous en connaissons une troisième espèce du Brésil (*Oph. Brevibarbe* N.) brune, a barbillons plus courts; . . ." This species cannot be identified with any particular species on the basis of this statement alone. However, type material of the species exists. We have examined MNHM 5772, the type material of *Ophidium brevibarbe*. There are two

specimens. One, the *Lepophidium* illustrated by Kaup (1856a:95; 1856b:154, pl. 16, fig. 4) clearly shows the rostral spine and head squamation which uniquely define the genus *Lepophidium*. The other is a specimen of *Ophidion holbrooki* (Putnam). *Lepophidium brevibarbe* and *Ophidion holbrooki* are the most common and widespread species of their respective genera, occurring together from the southeastern and Gulf coasts of the United States to the southern coast of Brazil. Both are species of the inner shelf. They are common "jar mates" in museums because early collectors commonly preserved one specimen of each type of organism which they obtained. It also was common practice to describe one specimen as a new species and return it to its jar which contained other species. Nothing in Kaup's description suggests a second specimen, and, since *Ophidion holbrooki* has very long pelvic rays, it could well be that Cuvier paid no attention to the second, smaller specimen. Kaup (1856a:95) recorded the length of the specimen as 200 mm. I measure it at 202 mm, but it is now quite soft. There is little question but that this is the specimen described by Kaup. If both specimens in MNHM 5772 are regarded as syntypes, we may regard Kaup (1856a, b) as having re-

stricted the name *brevibarbe* to the larger specimen, which becomes the lectotype, the specimen of *Ophidion holbrooki* becoming a paralectotype of *L. breviparbe*. Alternatively, one can regard the largest specimen as the holotype, and the smaller specimen as lacking type status as it did not enter into the description. I have followed the first course here. Counts and measurements of both specimens are given in Table 1. That *brevibarbe* was a *Lepophidium* was correctly noted long ago by Gill (1863:210).

Ophidium graellsii Poey, 1861

Poey (1861:425–426) described *Ophidium graellsii* in some detail, based on a specimen 230 mm long (=total length). He noted that the head was scaled except for the very tip of the snout. He also said that it lacked pyloric caeca. His later accounts (1868:402; 1876:137) added nothing, the latter being a mere listing of the name. Jordan and Evermann (1898:2488) correctly emended the spelling to *graellsii* and redescribed the species based on a small specimen from Havana, sent to them by Poey. They noted six developed gill rakers on the lower limb of the first gill arch (*O. holbrooki* has only four), a sharp spine at the snout tip, and a lanceolate swimbladder. Poey also sent a drawing of his type and a description, a short translation of the original, which Jordan and Evermann included in their account. Apparently two specimens of cusk-eels were sent to the Museum of Comparative Zoology as *Ophidium graellsii* and I consider them to be Poey's original material. They are now catalogued as MCZ 12440 and 12441 and bore Poey's original numbers 729 and 720 respectively. MCZ 12440 is a specimen of *Lepophidium breviparbe* (Cuvier) 216 mm standard length. It is gutted as expected if Poey has removed the gut for description. The specimen agrees with all of the salient features noted by Poey (1861) and Poey (in Jordan and Evermann 1898), except that one cannot attest to the

pyloric caeca. All species of *Lepophidium* always have at least a few small pyloric caeca. These could have been overlooked or the statement could have been based on MCZ 12441, a specimen of *Ophidion holbrooki* (Putnam). It also is gutted but all species of this genus lack pyloric caeca. Although it bears a label "Poey's orig.," it cannot be the type as it is too small and lacks scales on the head and a forward-projecting rostral spine. MCZ 12440, the specimen of *L. breviparbe* (Cuvier), is the holotype as Poey mentioned only one specimen. Poey commonly described species from one specimen stored with other, not necessarily related, species. There is no reason, except for the statement concerning the absence of pyloric caeca, to regard the specimen of *Ophidion holbrooki* (=MCZ 12441) as a paralectotype. *Ophidium graellsii* Poey is therefore a junior synonym of *Lepophidium breviparbe* (Cuvier). Counts and measurements of both specimens are given in Table 1.

Leptophidium profundorum Gill, 1863

Gill described this species from a single specimen collected by Commodore Rogers off the east coast of Florida in 60 fms (277 m). It is the type species, by monotypy, of *Leptophidium* Gill, 1863 (preoccupied) and also of the replacement genus *Lepophidium* (Gill, 1895). This name, which represents a valid species, has commonly been misapplied to the common shallow-water species whose correct name is *L. breviparbe*. Counts and measurements of the holotype (USNM 6247), are given in Table 1. Its gill chamber and gill bars are blackish, the peritoneum is silvery, and the esophagus is black. All these structures are without pigment in *L. breviparbe*. The specimen is badly faded so that no external pigment pattern is evident. The counts, proportions, and the internal pigment noted above are identical with those of *Lepophidium cervinum* (Goode and Bean, 1885), a common shelf species characterized by a row of pale spots on a tan back-

Table 1.—Morphometric data for the type and other relevant specimens of *Ophidium brevibarbe* (MNHN 5772), *Ophidium graellsii* (MCZ 12440, 12441), *Leptophidium profundorum* (USNM 6742) and *Leptophidium cervinum* (USNM 28764, 274258). Proportions are expressed in percent standard or (*) head length.

	MNHM 5772	MNHM 5772	MCZ 12440†	MCZ 12441	USNM 6472†	USNM 28764†	USNM 274258††	
	1†	2††					1	2
Standard length (mm)	202	123	216	160	168	232	220	218
Head length	20	21	19	18	17	17	16	17
Predorsal distance	23	26	22	27	21	22	22	23
Precanal (fin) distance	40	41	38	31	34	34	32	36
Snout tip to occiput	14	14	14	14	12	11	11	12
Snout tip to end of lateral line	85	—	—	89	89	95	92	98
Depth of body								
1) A1 dorsal-fin origin	11	—	11	12	10	—	98	93
2) A1 anal-fin origin	10	11	11	11	10	85	83	84
3) A1 occiput	11	13	14	12	10	90	82	86
Pectoral-fin length	92	97	79	14	70	91	79	85
Caudal-fin length	—	—	4.0	—	4.8	4.6	4.1	5.5
Pelvic ray length								
1) Anterior (outer)	7.6	14	6.3	13	4.9	5.4	4.0	5.0
2) Posterior (inner)	5.4	8.8	4.0	5.0	3.3	3.7	3.0	3.7
Snout length*	21	20	21	21	22	22	23	24
Postorbital length*	56	56	59	55	54	56	53	55
Snout tip to end of maxilla*	52	46	45	40	36	36	38	37
Orbit diameter*	23	24	30	27	27	27	25	26
Bony interorbital*	16	13	18	14	17	—	16	—
Pyloric caeca		0	—	—	3	3	—	3
Dorsal-fin rays	126	134	131	140	136	134	135	137
Anal-fin rays	107	106	109	114	115	114	117	117
Pectoral-fin rays	19-19	22-22	22-22	21-20	22-22	23-23	23-24	22-22
Vertebrae (precaudal + caudal)	15/56=71	16/50=66	3+7=10	15/53=68	17/58=75	16/58=77	15/60=75	16/60=76
Gillrakers	3+6=9	2+4=6	3+7=10	2+4=6	2+5=9	2+7=9	2+6=8	2+7=9

† Lectotype or holotype.

†† Paralectotype (see text).

ground, which ranges from Florida to eastern Canada. Although the probable identity of *profundorum* has been known to me for years, new species in the genus were being encountered regularly, and I wished to be certain that there was not a very similar, but unpatterned species, in the region. That no other species shares this combination of characters is now clear. *Lepophidium cervinum* (Goode and Bean) is, therefore, a junior synonym of *Lepophidium profundorum* Gill. Goode and Bean (1885:422) designated one specimen, USNM 28764, 262 mm total length, as the type. The jar bearing this number contained three specimens, the smaller two of which are recataloged as paratypes, USNM 274258. Counts and measurements of these three specimens are given in Table 1. *Lepophidium cervinum* is not of sufficient importance under guidelines laid down by the International Commission of Zoological Nomenclature, to merit a request to the Commission for conservation of the name.

The use of *Lepophidium brevibarbe* by Robins (1958: fig. 1d) for a species with short pelvic fins and a dark gill chamber was in error. That species lacks a name and is being described elsewhere.

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